CLAIMS

We claim:

1. A gas lighter comprising:

a reservoir having an upper wall;

a well, the well passing through the upper wall; and

a gas-dispensing device having at least one tubular element arranged in the well,

wherein the tubular element has at least one snap-fitting member designed to cooperate with a retaining element secured to the upper wall when the tubular element is assembled with the reservoir.

2. A lighter according to claim 1, wherein the tubular element comprises two snap-fitting members for engaging the retaining element to snap-fit the tubular element in the upper wall of the reservoir in the well.

3. A lighter according to claim 1, wherein the upper wall is formed integral with the reservoir.

4. A lighter according to claim 1, wherein the upper wall of the reservoir, the well and the tubular element are all in the shape of a cylinder that is circularly symmetrical.

5. A lighter according to claim 1, wherein the tubular element and the upper wall of the reservoir in the well have relatively smooth walls.

6. A lighter according to claim 1, further comprising an annular seal arranged between the wall and the tubular element.

7. A lighter according to claim 6, wherein the annular seal is arranged between a radially external rim formed on the tubular element and a radially internal rim formed on the wall.

8. A lighter according to claim 7, wherein the tubular element has a first axial distance (H_1), extending between the radially external rim and a point of contact where the snap-fitting member engages the retaining element, and the upper wall has a second axial distance (H_2) between the radially internal rim and the point of contact, the first and second distances (H_1, H_2) being chosen to exert a pre-determined pressure on the annular seal.

9. A lighter according to claim 1, wherein the retaining element is formed on a lower portion of an interior face of the upper wall.

10. A lighter according to claim 1, wherein the snap-fitting member is arranged in a lower part of the tubular element.

11. A lighter according to claim 10, wherein the snap-fitting member comprises a tab having a nib, the nib being directed radially outwards and having a transverse face, the tab being elastic in a radial direction.

12. A lighter according to claim 1, wherein the tubular element further comprises a regulating device.

13. A lighter according to claim 12, wherein the regulating device is a microporous membrane.

14. A lighter according to claim 13, wherein the tubular element further comprises a metal inner tube having a lowered end for receiving the microporous membrane.

15. A lighter according to claim 1, wherein the tubular element has an upper end comprising a radially internal rim defining an opening through which there passes an outlet duct of a valve, the valve being moveable along an axis of the tubular element, wherein a compression spring is arranged between the radially internal rim and the valve.

16. A lighter according to claim 1, wherein the reservoir is formed of a material selected from the group consisting of styrene acrylonitriles or acrylonitrile butadiene styrenes.

17. A lighter according to claim 1, wherein the tubular element is made of semi-crystalline polymer.

18. A gas lighter comprising:

a reservoir containing a fuel, the reservoir having an upper wall,

a well, the well passing through the upper wall; and

a gas-dispensing device having at least one tubular element including at least one snap-fitting member;

wherein the upper wall includes a retaining element for engaging the snap-fitting member.

19. A lighter according to claim 18, wherein the tubular element comprises two snap-fitting members for engaging the retaining element to snap-fit the tubular element in the upper wall of the reservoir in the well.

20. A lighter according to claim 18, wherein the upper wall is formed integral with the reservoir.

21. A lighter according to claim 18, wherein the upper wall of the reservoir, the well and the tubular element are all in the shape of a cylinder that is circularly symmetrical.

22. A lighter according to claim 18, wherein the tubular element and the upper wall of the reservoir in the well have relatively smooth walls.

23. A lighter according to claim 18, further comprising an annular seal arranged between the upper wall and the tubular element.

24. A lighter according to claim 23, wherein the annular seal is arranged between a radially external rim formed on the tubular element and a radially internal rim formed on the upper wall.

25. A lighter according to claim 24, wherein the tubular element has a first axial distance (H_1), extending between the radially external rim and a point of contact where the snap-fitting member engages the retaining element, and the wall has a second axial distance (H_2) between the radially internal rim and the point of contact, the first and second distances (H_1, H_2) being chosen to exert a pre-determined pressure on the annular seal.

26. A lighter according to claim 18, wherein the retaining element is formed on a lower portion of an interior face of the upper wall.

27. A lighter according to claim 18, wherein the snap-fitting member is arranged in a lower part of the tubular element.

28. A lighter according to claim 27, wherein the snap-fitting member comprises a tab having a nib, the nib being directed radially outwards and having a transverse face, the tab being elastic in a radial direction.

29. A lighter according to claim 18, wherein the tubular element further comprises a regulating device.

30. A lighter according to claim 29, wherein the regulating device is a microporous membrane.

31. A lighter according to claim 30, wherein the tubular element further comprises a metal inner tube having a lowered end for receiving the microporous membrane.

32. A lighter according to claim 18, wherein the tubular element has an upper end comprising a radially internal rim defining an opening through which there passes an outlet duct of a valve, the valve being moveable along an axis of the tubular element, wherein a compression spring is arranged between the radially internal rim and the valve.

33. A lighter according to claim 18, wherein the reservoir is formed of a material selected from the group consisting of styrene acrylonitriles or acrylonitrile butadiene styrenes.

34. A lighter according to claim 18, wherein the tubular element is made of semi-crystalline polymer.

35. A method of manufacturing a gas lighter having a reservoir including an upper wall having a retaining element and a well which passes through the upper wall, the method comprising:

providing a gas dispensing device within the well, the gas dispensing device including at least one tubular element having at least one snap-fitting member, wherein the step of providing a gas dispensing device within the well comprises:

placing the tubular element into the well until the snap-fitting member engages the retaining element thereby securing the dispensing device into the well.

36. The method of claim 35, wherein the tubular element comprises two snap-fitting members for engaging the retaining element.

37. The method of claim 35, wherein the upper wall is formed integral with the reservoir.

38. The method of claim 35, wherein the upper wall of the reservoir, the well and the tubular element are all in the shape of a cylinder that is circularly symmetrical.

39. The method of claim 35, wherein the tubular element and the upper wall of the reservoir in the well have relatively smooth walls.

40. The method of claim 35, further comprising providing an annular seal between the upper wall and the tubular element.

41. The method of claim 40, wherein the annular seal is arranged between a radially external rim formed on the tubular element and a radially internal rim formed on the upper wall.

42. The method of claim 41, wherein the tubular element has a first axial distance (H_1), extending between the radially external rim and a point of contact where the snap-fitting member engages the retaining element, and the wall has a second axial distance (H_2) between the radially internal rim and the point of contact, the first and second distances (H_1, H_2) being chosen to exert a pre-determined pressure on the annular seal.

43. The method of claim 35, wherein the retaining element is formed on a lower portion of an interior face of the upper wall.

44. The method of claim 35, wherein the snap-fitting member is arranged in a lower part of the tubular element.

45. The method of claim 44, wherein the snap-fitting member comprises a tab having a nib, the nib being directed radially outwards and having a transverse face, the tab being elastic in a radial direction.

46. The method of claim 35, wherein the tubular element further comprises a regulating device.

47. The method of claim 46, wherein the regulating device is a microporous membrane.

48. The method of claim 47, wherein the tubular element further comprises a metal inner tube having a lowered end for receiving the microporous membrane.

49. The method of claim 35, wherein the tubular element has an upper end comprising a radially internal rim defining an opening through which there passes an outlet duct of a valve, the valve being moveable along an axis of the tubular element, wherein a compression spring is arranged between the radially internal rim and the valve.

50. The method of claim 35, wherein the reservoir is formed of a material selected from the group consisting of styrene acrylonitriles or acrylonitrile butadiene styrenes.

51. The method of claim 35, wherein the tubular element is made of semi-crystalline polymer.